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By W. DONALD DUCKWORTH

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NEOTROPICAL MICROLEPIDOPTERA, XII[1]

FURTHER STUDIES ON GENUS LETHATA (LEPIDOPTERA: STENOMIDAE)

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After completion of my paper on the genus *Lethata* (1964), sufficient additional information has accumulated to warrant a supplement. This additional information has been derived from a number of sources including fieldwork, specimens borrowed from various institutions, and examination of heretofore unstudied type material.

As first defined, the genus *Lethata* consisted of 13 species of which 9 were removed from other genera and 4 were described as new. As a result of the current study, the genus has been enlarged to 31 species, 13 of which are herein described as new. Examination of type ma-

[1]Prepared with the aid of a National Science Foundation Grant. Previous parts of this same series are: I and II, Clarke, 1962, Proc. U.S. Nat. Mus., vol. 113, no. 3457, pp. 373–388; III, Clarke, 1964, ibid., vol. 115, no. 3480, pp. 61–84; IV, Duckworth, 1964, ibid., vol. 116, no. 3497, pp. 97–114; V, Obraztsov, 1964, ibid., vol. 116, no. 3501, pp. 183–196; VI, Clarke, 1964, ibid., vol. 116, no. 3502, pp. 197–204; VII, Obraztsov, 1966, ibid., vol. 118, no. 3727, pp. 221–232; VIII, Duckworth, 1966, ibid., vol. 118, no. 3531, pp. 391–404; IX, Obraztsov, 1966, ibid., vol. 118, no. 3535, pp. 577–622; X, Duckworth, 1966, ibid., vol. 119, no. 3540, pp. 1–6; XI, Obraztsov, 1966, ibid., vol. 119, no. 3543, pp. 1–12.

terial has disclosed that five species formerly placed in other genera required transfer. In addition, the females of four previously described species are described and figured for the first time, and the first host plant information is recorded. The key to the species of *Lethata* has been completely revised and includes all species currently assigned to the genus, thus superseding all previous keys. Color characters were not utilized in the key due to the variability observed in several species where sufficient specimens were available to reflect inconsistences. It is becoming more and more apparent that examination of the genitalia is required for reliable species recognition in the Stenomidae.

Although distributional data are sorely lacking for most species, distribution maps have been prepared for all of the species (except *myopina* and *glaucopa*) in order to demonstrate the available information in the most graphic fashion. In addition, many of the localities are difficult to locate on the most commonly available maps; thus, the included maps will provide a useful guide to the geographic location.

One of the most perplexing problems encountered during the course of this study is the paucity of specimens and biological data. This situation was mentioned in my earlier paper with an expressed hope that planned fieldwork would provide additional information. Although progress has been made during the intervening two years, it has become apparent that the rate of accumulation will be much slower than originally anticipated. The numbers of individual specimens encountered through conventional collecting techniques, e.g., attraction to light, have been very sparse; and since very little rearing is being done in Central and South America, except for economic plants, the outlook is rather dim. The one bright spot to date is the receipt from Venezuela of a large series of *Lethata anophthalma* (Meyrick) reared from Guava, *Psidium guajava* L., which represents the first host plant record for the genus. Although it would be rash to attempt to generalize on this small piece of information, several possibilities seem worthy of mention here. First, the acquisition of a large series (30 specimens) through rearing would seem to indicate that the failure to obtain larger samples through light attraction is possibly due to only a slight attraction to light and/or not having the light in the right place at the right time. Second, should there prove to be host specificity between *Lethata* and either the family Myrtaceae or the genus *Psidium*, it would seem reasonable to suspect that there will prove to be a large number of as yet undescribed species of *Lethata* to be discovered. Certainly the increase in size of the genus from 13 to 31 recognized species in two years time would suggest that the ultimate size in terms of species will be much greater. A great deal more rearing will be necessary before answers to the many ques-

tions posed by this genus are answered. It is hoped that the recording of the first host plant association will provide a starting point for additional activity in this area.

The author wishes to acknowledge with thanks the cooperation and aid of the following individuals and institutions who, through their support and encouragement, have materially aided the present study: Dr. F. Fernandez Yepez, Falcultad de Agronomia, Universidad Central de Venezuela; Dr. Robert L. Dressler, Smithsonian Tropical Research Institute, Canal Zone, Panama; Mr. Karel A. Hallebeek, Dr. Léonce Bonnefil, Dr. J. K. Knoke, Instituto Interamericano de Ciencias Agricolas de la O.E.A., Turrialba, Costa Rica, for support and assistance in various field studies; Dr. J. J. Hanneman, Institut für Spezielle Zoologie und Zoologisches Museum der Humbolt-Universität zu Berlin; Dr. Fritz Kasy, Naturhistorisches Museum, Vienna; Mr. P. E. S. Whalley, Mr. Alan Watson, British Museum (Natural History); Dr. J. G. Franclemont, Cornell University; Dr. Klaus Sattler, Zoologische Sammlung des Bayerischen Staates, Munich, for lending types and other specimens in their charge for study.

The author also wishes to thank Mrs. Sandra Duckworth for assistance in all phases of the study, Mr. Andre Pizzini for the genitalic drawings and distribution maps, and Mr. Jack Scott for the photographic work.

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Genus *Lethata* Duckworth

Lethata Duckworth, 1964, Proc. U.S. Nat. Mus., vol. 116, p. 98.

Type-species: *Stenoma trochalosticta* Walsingham, by original designation.

The additional information contained herein has not materially affected the original concept of the genus and the original description requires only the following emendation.

Female genitalia: Ovipositor lobes lightly or heavily sclerotized; intersegmental membrane between ovipositor lobes and eight segment sclerotized or membranous; ostium bursae sclerotized or membranous; ductus bursae sclerotized or membranous; corpus bursae membranous, with two dentate signa connected by narrow, weakly sclerotized band.

Key to Species of *Lethata* Based on Genitalia

1. Male 2
   Female 29
2. Anellar lobes symmetrical 3
   Anellar lobes asymmetrical 27

3. Vesica armed with cornuti 4
Vesica without cornuti 23
4. Vesica armed with small spiculate cornuti 5
Vesica armed with one or more large, heavily sclerotized cornuti . . . 10
5. Harpe with saccular lobe bearing two long, heavily sclerotized setae. **trochalosticta** (Walsingham)
Harpe not as above 6
6. Aedeagus with a strong, laterally curved dorsal process at apical two-thirds, ventrally hooked process at apex . . . . . **myopina** (Zeller)
Aedeagus not as above 7
7. Gnathos cylindrical, finger-like 8
Gnathos dorsoventrally flattened 9
8. Anellar lobes approximately triangular with single, short spine at apex; aedeagus without spine, apex blunt . . . . . **fusca** Duckworth
Anellar lobes narrow with large, strongly recurved, hooklike spine at apex; aedeagus with posterior spine, apex sharply pointed . . **satyropa** (Meyrick)
9. Anellar lobes heavily sclerotized, spinelike at apex; apical process of aedeagus with large lateral spine . . . . . **dispersa,** new species
Anellar lobes not heavily sclerotized, evenly tapered at apex; apical process of aedeagus with small lateral spine . . . . **angusta,** new species
10. Aedeagus with one cornutus 11
Aedeagus with more than one cornutus 15
11. Aedeagus with one or more lateral spines 12
Aedeagus without lateral spines 14
12. Aedeagus with one lateral spine 13
Aedeagus with two lateral spines . . . . . **obscura,** new species
13. Anellar lobes divided into two acute apical processes; lateral spine of aedeagus at approximately apical two-thirds . . . . . **irresoluta,** new species
Anellar lobes not divided, apex truncate with dentate spines; lateral spine of aedeagus at apex . . . . . **aletha,** new species
14. Aedeagus with slightly recurved process at apex; cornutus long, slender. **gypsolitha** (Meyrick)
Aedeagus without process at apex; cornutus short, stout. **fernandezyepezi,** new species
15. Aedeagus with large apical process; anellar lobes narrowing sharply at middle forming narrow, apically acute projections 16
Aedeagus without large apical process; anellar lobes not as above . . . 17
16. Aedeagus with apical process hooklike . . . . . **buscki** Duckworth
Aedeagus with apical process straight . . . . . **asthenopa** (Meyrick)
17. Aedeagus with vesica armed with more than six cornuti 18
Aedeagus with vesica armed with less than six cornuti 22
18. Harpe with saccular lobe bearing one short, heavy seta at apex; apex of gnathos heart shaped . . . . . **striolata** (Meyrick)
Harpe without saccular lobe; apex of gnathos not as above 19
19. Gnathos cylindrical, finger-like 20
Gnathos dorsoventrally flattened 21
20. Aedeagus large, broad basally, vesica armed with ladder-like series of large to small cornuti extending from base to apex; anellar lobes of near uniform width throughout . . . . . **invigilans** (Meyrick)
Aedeagus small, narrow, vesica armed with two clusters of small cornuti at apex and single, large cornutus basally; anellar lobes approximately triangular in shape, pointed at apex . . . . . **anophthalma** (Meyrick)

21. Anellar lobes long, narrow; aedeagus with a small posteriorly directed spine at apex . . . . . **herbacea** (Meyrick)
Anellar lobes short, broad; aedeagus without posteriorly directed spine. **monopa,** new species
22. Aedeagus with one or more lateral spines 23
Aedeagus without lateral spines 24
23. Aedeagus with two lateral spines, one at apex, one at apical two-thirds. **mucida,** new species
Aedeagus with one lateral spine at apical four-fifths . . **optima,** new species
24. Anellar lobes serrate beyond apical third; harpe broader basally. **bovinella** (Busck)
Anellar lobes not serrate; harpe of approximately equal width throughout. **leucothea** (Busck)
25. Gnathos with dorsal lobe at apex; harpe with dense cluster of long setae at midpoint; apex of anellar lobes produced into large hooklike process. **lanosa,** new species
Gnathos without dorsal lobe; harpe without dense cluster of long setae on harpe; apex of anellar lobes simple 26
26. Aedeagus with two laterally directed processes at apex, one extending from each side, the larger one slightly recurved . . . . . **glaucopa** (Meyrick)
Aedeagus with large, heavily sclerotized process posteriorly. **pyrenodes** (Meyrick)
27. Aedeagus with large lateral spine at apical three-fourths, vesica armed with one large cornutus . . . . . **illustra,** new species
Aedeagus without lateral spine, vesica without cornuti 28
28. One anellar lobe long, narrow, curved 90° laterad at middle and extending to base of opposite harpe; the other shorter, broader, sharply recurved; aedeagus with large, recurved spine at apex . . . . **aromatica** (Meyrick)
One anellar lobe narrow, pointed at apex; the other broad with three large spines apically; aedeagus with apex on one side produced into long bladelike process . . . . . **ruba** Duckworth
29. Inception of ductus seminalis near ostium 30
Inception of ductus seminalis near midpoint or corpus bursae 35
30. Ductus bursae with corrugated sclerotization 31
Ductus bursae not as above 32
31. Lateral margins of ostium bursae straight, parallel; ductus bursae adjacent to ostium bursae enlarged, pouchlike, with heavy, corrugated sclerotization . . . . . **anophthalma** (Meyrick)
Lateral margins of ostium bursae concave; ductus bursae adjacent to ostium bursae not enlarged . . . . . **aromatica** (Meyrick)
32. Ostium bursae membranous; lobes of ovipositor heavily sclerotized; intersegmental membrane between ovipositor lobes and eighth segment sclerotized . . . . . **amazona,** new species
Ostium bursae sclerotized, lobes of ovipositor lightly sclerotized; intersegmental membrane not as above 33
33. Ostium bursae reniform, width greater than length . . **pyrenodes** (Meyrick)
Ostium bursae not reniform, length equal to or greater than width . . . 34
34. Ostium bursae with a large lateral indentations; ductus bursae membranous, emerging laterally from ostium bursae. . . . . **sciophthalma** (Meyrick)
Ostium bursae without lateral indentation; ductus bursae sclerotized at junction with ostium bursae, not emerging laterally. **oculosa,** new species

35. Ductus bursae membranous; ostium bursae sclerotized, with two lateral pouches; ostium V-shaped . . . . . **trochalosticta** (Walsingham)
Ductus bursae partially sclerotized or with patch of spines; ostium bursae without lateral pouches; ostium not as above 36
36. Ductus bursae with small patch of spines near inception of ductus seminalis. **bovinella** (Busck)
Ductus bursae without spines. 37
37. Ductus bursae with sinuous, ribbon-like sclerotization from ostium bursae to inception of ductus seminalis . . . . . **invigilans** (Meyrick)
Ductus bursae not as above. 38
38. Ostium a heavily sclerotized ring; ostium bursae with heavily sclerotized corrugations . . . . . **buscki** Duckworth
Ostium not a heavily sclerotized ring; ostium bursae sclerotized, partially divided at middle by incomplete, internal partition from lateral wall. **illustra,** new species

Lethata trochalosticta (Walsingham)

FIGURE 31; MAP 1

Stenoma trochalosticta Walsingham, 1913, *in* Godman and Salvin, Biologia Centrali-Americana, vol. 42 (Lepidoptera-Heterocera, vol. 4), p. 177.

Female genitalia (slide WDD 3597): Ductus bursae membranous; ostium bursae sclerotized, with two lateral pouches extending from ostium to midpoint of ostium bursae; ostium irregular, V-shaped; inception of ductus seminalis near midpoint of ductus bursae.

Type: In the U.S. National Museum.

Type-locality: Chiriquí, Panama.

Distribution: PANAMA: Chiriquí (no date). COSTA RICA: Sixaola Río (no date); Turrialba (February, March). ECUADOR: Balzapamba, Pr. Bolívar (no date).

Two female specimens collected by the author in Costa Rica provided the basis for the above description and are the first representatives of this sex obtained thus far.

The specimen from Ecuador has considerably more reddish-brown shading on the forewing, causing the general appearance to be much darker; however, the maculation is unchanged.

The two lateral pouches in the ostium bursae readily separate the females of *L. trochalosticta* from all other species.

Lethata anophthalma (Meyrick)

MAP 2

Stenoma anophthalma Meyrick, 1931, Exotic Microlepidoptera, vol. 4, p. 36.
Stenoma badiella Amsel, 1956, Bol. Ent. Venezolana, vol. 10, p. 298.
Lethata maculata Duckworth, 1964, Proc. U.S. Nat. Mus., vol. 116, p. 106.

Type: In the Naturhistorisches Museum, Vienna.

Type-localities: Fiebrig, Paraguay (*anophthalma*); Caracas, Los

Venados, Venezuela (*badiella*); Nova Teutônia, Brazil, 300–500 m (*maculata*).

Food plant: *Psidium guajava* L.

Distribution: PARAGUAY: San Bernadino (no date); Central Paraguay (no date); Sapucay (September). BOLIVIA: Río Yacuma, Espíritu (July). ARGENTINA: Paraná, San Ignacio Mission (August). BRAZIL: Nova Teutônia, 300–500 m (October); Teffé (December, January); Santarém (no date). FRENCH GUIANA: St. Laurent (October). SURINAM: Moengo, Boven, Cottica River (May). BRITISH GUIANA: Christianburg, R. Demerara (no date). VENEZUELA: Caracas, Los Venados (no date); Maracay (August); Macapo (June). COLOMBIA: Bogotá (no date).

Through the courtesy of Dr. F. Fernandez Yepez, Facultad de Agronomia, Universidad Central de Venezuela, I have had the opportunity to study a large series of specimens of this species reared from guava, *Psidium guajava* L., in Venezuela. This represents the first host-plant record in the genus *Lethata* and suggests some interesting possibilities should additional information indicate a close relationship between this genus and either the family Myrtaceae in general or the genus *Psidium* in particular. In any event, the knowledge at hand permits a clearer understanding of the widespread distribution of this species (see map 2) that has undoubtedly contributed to its description as new on three separate occasions as established in my recent paper (1966) and listed in the above synonymy.

Lethata aromatica (Meyrick)

FIGURE 32; MAP 1

Stenoma aromatica Meyrick, 1915, Exotic Microlepidoptera, vol. 1, p. 449.

Female genitalia (slide WDD 3608): Ductus bursae with corrugated sclerotization from ostium bursae to beyond inception of ductus seminalis, with accessory pouch originating from near corpus bursae; ostium bursae sclerotized, flaring laterally at inception of ductus bursae; inception of ductus seminalis near ostium bursae.

Type: In the British Museum (Natural History).

Type-locality: São Paulo, Brazil.

Distribution: BRAZIL: São Paulo (no date); Paraná (no date); Castro, Paraná (no date); Espírito Santo (June); Santa Catherina (no date); Taperinha (June, August, September).

Additional material obtained primarily from the British Museum has increased the range of this species; however, it still appears to be restricted to Brazil. This same material provided the first female specimens of this species from which the above description was derived.

Lethata buscki Duckworth

FIGURE 33; MAP 3

Lethata buscki Duckworth, 1964, Proc. U.S. Nat. Mus., vol. 116, p. 102.

Female genitalia (slide WDD 3055): Ductus bursae with irregular sclerotized corrugations from ostium bursae to inception of ductus seminalis, membranous beyond; ostium a heavily sclerotized ring; ostium bursae with heavy sclerotized corrugations; inception of ductus seminalis near midpoint of ductus bursae.

Type: In the U.S. National Museum.

Type-locality: Punta Gorda, British Honduras.

Distribution: BRITISH HONDURAS: Punta Gorda (June, July, August, October, November). HONDURAS: Río Temas (April). MEXICO: Santo Domingo, 15 miles southeast of Simojovel, Chiapas (July); El Zapotal, 2 miles south of Tuxtla, Chiapas (August); Córdoba, Veracruz (August).

Additional material from the British Museum and the University of California collection has increased the known distribution of this species and provided the first examples of the female.

Lethata pyrenodes (Meyrick)

FIGURE 34; MAP 4

Stenoma pyrenodes Meyrick, 1915, Exotic Microlepidoptera, vol. 1, p. 448.

Female genitalia (slide WDD 3603): Ductus bursae membranous; ostium bursae sclerotized, short, reniform; ostium broad; inception of ductus seminalis near ostium.

Type: In the British Museum (Natural History).

Type-locality: Paraná, Argentina.

Distribution: ARGENTINA: Paraná (no date). BRAZIL: Castro, Paraná (no date).

Additional female specimens from the British Museum have enabled the author to describe and illustrate the female genitalia of this species.

Lethata striolata (Meyrick), new combination

PLATE 1 (FIG. 1); FIGURES 1, 2; MAP 5

Stenoma striolata Meyrick, 1932, Exotic Microlepidoptera, vol. 4, p. 302.

Alar expanse 25 mm.

Antenna brownish. Head ochreous shaded with brown; second segment of labial palpus ochreous, heavily shaded with brown on outer surface, apical segment ochreous. Legs ochreous, fore- and midlegs shaded with brown. Thorax and tegula ochreous. Forewing ochreous, irregularly covered with light gray transverse striae and occasional fuscous scales; costal edge pale yellow, terminal edge

yellow, a gray streak on dorsum from basal fourth to apical three-fourths; cilia whitish gray. Hindwings pale gray, costal third and cilia suffused ochreous white.

Male genitalia (slide WDD 3353, type): Uncus short, recurved; gnathos heart-shaped at apex; harpe narrow, rounded at apex, with two or more heavy setae on saccular margin, the innermost one borne apically on distinct lobe; aedeagus pointed at apex, vesica armed with numerous cornuti.

Female genitalia: Unknown.

Type: In the Naturhistorisches Museum, Vienna, Austria.

Type-locality: Neu Bremen, Santa Catharina, Brazil.

Distribution: Known only from the type-locality.

The presence of a saccular lobe bearing a short, heavy, apical seta on the harpe in the male genitalia readily distinguishes this species.

The transverse striae on the forewing are unique in the genus *Lethata* and are very similar to the maculation found in the oecophorid genus *Psilocorsis* Clemens.

Lethata monopa, new species

PLATE 1 (FIG. 2); FIGURES 3, 4; MAP 8

Alar expanse 33 mm.

Antenna brown. Head fuscous; second segment of labial palpus fuscous on outer side, light brown on inner side, apical segment light brown. Legs brown. Thorax and tegula brown. Forewing brown with costa and termen faintly ochreous; from anal angle an area of fuscous shading extends upward and outward to near costa and spot at end of cell; spot at end of cell consisting of a ring of light brown enclosing a spot of slightly darker brown; at apical fourth a transverse, outwardly curved faint fuscous line extending from costa to dorsum; cilia brown basally, faintly ochreous apically. Hindwing gray, cilia gray, lighter at anal angle.

Male genitalia (slide WDD 3600, type): Uncus short, recurved, pointed at apex; gnathos broad, dorsoventrally flattened; harpe long, rather narrow, broadly pointed at apex; anellar lobes symmetrical, short, broad with slight posterior projections; aedeagus with a ventrolateral lump, apex broadly pointed, vesica armed with two clusters of cornuti, one group with cornuti more than twice the length of the other.

Female genitalia: Unknown.

Type: In the collection of the British Museum (Natural History).

Type-locality: Río de Janeiro, Brazil.

Distribution: Known only from the type-locality.

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Described from male holotype: "Río Jan., Felder Coll., Rothschild 1913–86"; and one male paratype: "Río de Janeiro, Nov., (H. H. Smith)."

The size and shape of the anellar lobes and the shape and armature of the aedeagus in the male genitalia readily distinguish this species.

***Lethata oculosa*, new species**

PLATE 1 (FIG. 3); FIGURE 38; MAP 10

Alar expanse 28 mm.

Antenna brownish. Head brown shading to whitish between eyes; second segment of labial palpus brown on outer side, whitish on inner side, apical segment whitish. Legs whitish, fore- and midlegs lightly shaded with brown. Thorax and tegula deep brown. Forewing grayish brown with costal edge light ochreous; deep brown suffusion from anal angle over basal third; spot at end of cell consisting of ring of deep brown enclosing whitish scales with dot of deep brown in center; an indistinct outwardly curving deep brown transverse line from costa to dorsum at apical two-thirds; cilia brown at base, whitish beyond. Hindwing gray; cilia gray.

Male genitalia: Unknown.

Female genitalia (slide WDD 3602, type): Ductus bursae sclerotized at junction with ostium bursae, membraneous beyond; ostium bursae sclerotized, length and width approximately equal; ostium slightly flaring at edge; inception of ductus seminalis near ostium bursae.

Type: In the collection of the British Museum (Natural History).

Type-locality: São Paulo, Brazil.

Distribution: Known only from the type-locality.

Described from the female holotype: "São Paulo, S. E. Brazil, 1892–5, (E. D. Jones), 1912–534."

The size and shape of the ostium bursae serves to distinguish *L. oculosa* from the other known females in the genus.

***Lethata lanosa*, new species**

PLATE 1 (FIG. 4); FIGURES 5, 6; MAP 8

Alar expanse 24 mm.

Antenna brownish. Head brown with pink shading, face whitish, second segment of labial palpus brown on outer side, pinkish white on inner side, apical segment brown. Legs whitish, fore- and midlegs shaded with fuscous. Thorax and tegula fuscous with postmedian ridge of raised scales. Forewing brown with costal edge narrowly deep ochreous; an indistinct fuscous line obliquely from anal angle to costa at midpoint; dorsal edge narrowly fuscous; spot at end of cell consisting of fuscous ring enclosing brown spot; outwardly curved

transverse faint fuscous line at apical fourth; cilia brown. Hindwing fuscous, cilia gray.

Male genitalia (slide WDD 3626, type): Uncus short, recurved; gnathos with dorsal lobe producing teardrop shape to apex; harpe broadest at midpoint; anellar lobes symmetrical, broad basally, with large hooklike process at apex; aedeagus sinuate, pointed at apex, vesica without cornuti.

Female genitalia: Unknown.

Type: In the collection of the U.S. National Museum, no. 69085.

Type-locality: El Valle, Cocle Prov., Panama.

Distribution: Known only from the type-locality.

Described from the male holotype; "Panama: El Valle, Cocle Prov., 22.IV.65 (S. S. and W. D. Duckworth)."

The extraordinary development of the anellar lobes readily distinguishes this species.

***Lethata gypsolitha* (Meyrick), new combination**

PLATE 1 (FIG. 5); FIGURES 7, 8; MAP 7

Stenoma gypsolitha Meyrick, 1931, Exotic Microlepidoptera, vol. 4, p. 38.

Alar expanse 23 mm.

Antenna brownish. Head brownish gray shaded with rose; second segment of labial palpus brown, apical segment whitish. Legs whitish. Thorax and tegula brownish ochreous. Forewing brownish ochreous with faintly rose costa; few to many scattered dark scales irregularly scattered over entire wing; a faint, outwardly curved, transverse line at apical fourth extending from costa to dorsum; at end of cell a fuscous spot or a circle of fuscous scales enclosing a gray-whitish spot. Hindwing ochreous overcast with gray scales; cilia ochreous.

Male genitalia (slide WDD 3341, type): Uncus truncate, slightly recurved; gnathos bluntly rounded; harpe bluntly pointed at apex; anellar lobes symmetrical, without processes, smoothly rounded at apex; aedeagus with slightly recurved process at apex, vesica armed with one long, slender cornutus.

Female genitalia: Unknown.

Type: In the Naturhistorisches Museum, Vienna, Austria.

Type-locality: San Bernardino, Paraguay.

Distribution: PARAGUAY; San Bernardino (no date). ARGENTINA: Territ des Missions (September).

This species is known only from the male type in the Naturhistorisches Museum, Vienna, and one male specimen from Argentina in the collection of the United States National Museum.

Lethata herbacea (Meyrick), new combination

PLATE 1 (FIG. 6); FIGURES 9, 10; MAP 7

Stenoma herbacea Meyrick, 1931, Exotic Microlepidoptera, vol. 4, p. 38.

Alar expanse 25 mm.

Antenna brown. Head brownish fading to white on face; labial palpus broken. Legs broken. Thorax and tegula pale green. Forewing pale green with scattered fuscous scales; costal edge yellow ochreous, dorsal edge white at base, brown beyond; an oblique brown line from dorsum at basal angle extending half across wing; spot at end of cell composed of ring of dark green enclosing spot of pinkish green with dull greenish spot at its center, a faint brownish oblique line from lower extremity to near dorsum; an outwardly curved transverse line from costa at apical third to dorsum before tornus, upper half dark green, lower brown; a dark green terminal line; cilia light green basally, grayish beyond. Hindwing pale grayish; cilia yellow ochreous basally, whitish beyond.

Male genitalia (slide WDD 3339, type): Uncus short, slightly recurved; gnathos short, dorsoventrally flattened; harpe broad at base tapering to bluntly rounded apex; anellar lobes symmetrical, somewhat broader at base narrowing to elongate finger-like apex; aedeagus with a small, posteriorly directed spine at apex, vesica armed with numerous heavy cornuti.

Female genitalia: Unknown.

Type: In the Naturhistorisches Museum, Vienna, Austria.

Type-locality: Ypiranga, São Paulo, Brazil.

Distribution: Known only from the type-locality.

This species is easily recognized by the shape and armature of the aedeagus in the male genitalia.

Lethata myopina (Zeller), new combination

PLATE 2 (FIG. 1); FIGURES 11, 12

Cryptolechia myopina Zeller, 1877, Horae Soc. Ent. Rossicae, vol. 13, p. 271.

Alar expanse 24 mm.

Antenna broken. Head rosy white; labial palpus broken. Legs whitish, fore- and midlegs shaded with brown. Thorax and tegula yellow. Forewing yellow; costal edge faintly shaded with rose; dorsal edge rosy ochreous from basal angle to apical three-fourths; spot at end of cell composed of ring of rosy ochreous enclosing white spot; cilia yellow at base, white beyond. Hindwing whitish; cilia whitish at anal angle, ochreous at wing apex.

Male genitalia (slide WDD 3574, type): Uncus short, slightly recurved, pointed at apex; gnathos short, broad; harpe broad to midpoint, narrowing to blunt apex; anellar lobes symmetrical, broad

at base with two pointed apical lobes, anterior lobe much longer than posterior; aedeagus with a strong laterally curved, dorsal process at apical two-thirds, ventrally hooked process at apex, vesica without cornuti.

Female genitalia: Unknown.

Type: In the Zoologisches Museum der Humboldt-Universität zu Berlin.

Type-locality: Brazil.

Distribution: Known only from the type-locality.

This is one of the two species for which a distribution map was not prepared. The species is known only from the type specimen, for which the only locality given is Brazil. This obviously is insufficient for mapping purposes and further information must be acquired before a map is prepared.

The strong, ventrally hooked apical process and laterally curved dorsal process at apical two-thirds on the aedeagus in the male genitalia readily separates *L. myopina* from other species in the genus.

***Lethata dispersa*, new species**

PLATE 2 (FIG. 2); FIGURES 13, 14; MAP 6

Alar expanse 23 mm.

Antenna, head, labial palpus stramineous. Legs stramineous lightly shaded with brown. Thorax and tegula yellow. Forewing yellow with costa rosy; dorsum narrowly edged brown; faint spot in fold brown; spot at end of cell consisting of ring of brown enclosing whitish spot; oblique brown line extending from costa at near midpoint through spot at end of cell to tornus; terminal line brown; cilia brown basally, whitish beyond. Hindwing gray; cilia whitish.

Male genitalia (slide WDD 3308, type): Uncus short, recurved; gnathos short, broad; harpe short, broad, articulating with upper edge of anellar lobe; anellar lobes symmetrical, broad at base narrowing sharply at midpoint, apical half falciform; aedeagus broad, with acute apical projection bearing one laterally directed spine, vesica armed with numerous spiculate cornuti.

Female genitalia: Unknown.

Type: In the collection of the U.S. National Museum, no. 69086.

Type-locality: Chapada, Matto Grosso, Brazil.

Distribution: Known only from the type-locality.

Described from the male holotype: "Chapada, near Cuyabá, Matto Grosso, Brazil (H. H. Smith)."

This species is very closely related to *L. angusta*; however, the form of the anellar lobes and the large, laterally directed spine on the apical process of the aedeagus in the male genitalia serve to distinguish *L. dispersa*.

Lethata angusta, new species

PLATE 2 (FIG. 3); FIGURES 15, 16; MAP 9

Alar expanse 28 mm.

Antenna missing. Head whitish, labial palpus missing. Legs whitish shaded with brown. Thorax and tegula brown. Forewing ochreous overcast with brown; costa narrowly brick red; a faint brownish spot on costa at midpoint; spot at end of cell consisting of irregular patch of purplish scales; terminal line brown; cilia brown basally, lighter beyond. Hindwing whitish overcast with gray; cilia whitish, irregularly brownish basally.

Male genitalia (slide WDD 3606, type): Uncus sharply recurved; gnathos as in *dispersa*; harpe as in *dispersa*; anellar lobes symmetrical, similar to those in *dispersa* except slimmer and not as heavily sclerotized and recurved at apex; aedeagus as in *dispersa* except apical process narrower and laterally directed spine much smaller.

Female genitalia: Unknown.

Type: In the collection of the British Museum (Natural History).

Type-locality: Castro, Paraná, southern Brazil.

Distribution: Known only from the type-locality.

Described from the male holotype: "Castro, Paraná, S. Brazil, 1898 (Jones), Walsingham Collection, B. M. 1910–427."

This species is very close to *L. dispersa* and the distinguishing characteristics have been discussed in the remarks concerning that species.

Lethata fernandezyepezi, new species

PLATE 2 (FIG. 4); FIGURES 17, 18; MAP 6

Alar expanse 27 mm.

Antenna brownish. Head whitish shaded with rose; second segment of labial palpus brown on outer side, whitish on inner side, apical segment whitish. Legs whitish, forelegs heavily shaded with brown. Thorax and tegula reddish brown anteriorly, gray scales with white tips posteriorly. Forewing yellow shaded with brown, costal edge deep ochreous underlined with reddish brown; dorsum reddish brown; a reddish-brown area extending from anal angle to basal third; spot in fold at basal third fuscous; spot at end of cell indistinct, consisting of irregular ring of reddish-brown scales enclosing white spot; an outwardly curving transverse line of reddish-brown spots from costa to dorsum; cilia rosy gray. Hindwing gray in anal area, yellow at apex; cilia yellow shaded with gray at anal angle.

Male genitalia (slide WDD 3625, type): Uncus short, recurved; gnathos long with finger-like projection at apex; harpe with soft, fleshy area on sacculus; anellar lobes symmetrical, only slightly

narrowing to rounded apex; aedeagus long, curved, blunt at apex; vesica armed with one short, stout cornutus.

Female genitalia: Unknown.

Type: In the collection of the U.S. National Museum, no. 69087.

Type-locality: Rancho Grande, Aragua, Venezuela.

Distribution: Known only from the type-locality.

Described from the male holotype: "Venezuela, Ar., Rancho Grande, 1100 m., 16–19.I.66, (S. S. and W. D. Duckworth)"; and one male paratype with the same data.

This species is named in honor of Dr. F. Fernandez Yepez, distinguished entomologist at the Universidad Central de Venezuela, Maracay, who has been of invaluable aid in my study of the family Stenomidae.

The long finger-like projection at the apex of the gnathos, fleshy area on the sacculus, and shape and armature of the aedeagus in the male genitalia readily separate this species from all others.

Lethata irresoluta, new species

PLATE 2 (FIG. 5); FIGURES 19, 20; MAP 8

Alar expanse 30 mm.

Antenna whitish. Head brownish, lighter between eyes; second segment of labial palpus light brown on outer side, whitish on inner side, apical segment white. Legs whitish, fore- and midlegs shaded with brown. Thorax and tegula fulvous. Forewing fulvous with costa narrowly deep ochreous underlined with purplish from base to apical three-fourths; from apical three-fourths to tornus deep yellow; dorsum irregularly edged with gray; spot at end of cell purplish; cilia brown with white tips. Hindwing whitish; cilia with tinge of brown basally, whitish beyond.

Male genitalia (slide WDD 3615, type): Uncus short, recurved; gnathos short, thick, flattened dorsally; harpe broad, bluntly rounded; anellar lobes symmetrical, consisting of broad base with two apical processes, one long, digitate, the other short, recurved; aedeagus with large lateral spine near apex from base of which a small sclerotized flange extends posteriorly, vesica armed with one large cornutus.

Female genitalia: Unknown.

Type: In the collection of the British Museum (Natural History).

Type-locality: Agualani, Carabaya, 900 ft., Peru.

Distribution: Known only from the type-locality.

Described from the male holotype: "Agualani, Carabaya, 900 ft., Oct. 05. wet season (G. R. Ockenden)."

The shape of the anellar lobes and armature of the aedeagus readily separates *irresoluta* from the other species of *Lethata*.

This species, along with *illustra*, *aletha*, *mucida*, *obscura*, and *optima*, appear to form a closely related group within the genus. The maculation is very similar and the genitalia have certain general characteristics in common. There are sufficient distinguishing characters to separate the species; however, additional remarks concerning relationships must await further information.

***Lethata illustra*, new species**

PLATE 2 (FIG. 6); FIGURES 21, 22, 37; MAP 6

Alar expanse 27–32 mm.

Antenna brownish. Head whitish, second segment of labial palpus brown on outer side, whitish on inner side, apical segment brownish. Legs whitish shaded with brown. Thorax and tegula purplish brown. Forewing brown shaded with darker brown on basal two-thirds; costa narrowly ochreous; spot at end of cell consisting of ring of purplish scales enclosing white spot; a faint, outwardly curving transverse line from costa above spot to near tornus; entire wing sprinkled with fuscous scales; cilia brown. Hindwing whitish overcast with gray; cilia whitish at anal angle, grayish at apex.

Male genitalia (slide WDD 3618): Uncus short, recurved; gnathos short, broad, dorsally concave; harpe short, of approximately uniform width to midpoint, then tapering to bluntly pointed apex; anellar lobes asymmetrical, one consisting of a lightly sclerotized, setiferous, digitate process anteriorly and a long, heavily sclerotized, falciform process posteriorly, other consisting of large basal area with two apical processes similar in position and shape to opposite lobe but shorter; aedeagus with large lateral spine near apex, vesica armed with one large cornutus.

Female genitalia (slide WDD 3616, type): Ductus bursae sclerotized and corregated from ostium bursae to inception of ductus seminalis; ostium bursae sclerotized, partially divided at middle by incomplete internal partition from lateral wall; ostium broad, somewhat flared laterally; inception of ductus seminalis near corpus bursae.

Type: In the collection of the British Museum (Natural History).

Type-locality: La Oroya, Río Inambari, 3100 ft., Peru.

Distribution: PERU: La Oroya, Río Inambari, 3100 ft. (October); Santo Domingo, Carabaya, 6000–6500 ft. (December).

Described from the female holotype: "La Oroya, R. Inambari, S. E. Perú, 3100 ft., wet s., Oct. 1904 (G. Ockenden)"; one female paratype: "Diff. local in Carabaya, dry s., 2500–6000 ft., VI 04 (G. Ockenden)"; one female paratype: "S. Domingo, Carabaya, 6500 ft., Dec. 02, wet s., (G. Ockenden)"; and one male paratype: "S. Domingo, Carabaya, 6000 ft., XII 01, wet seas. (Ockenden)."

The asymmetrical anellar lobes readily distinguish this species.

Lethata aletha, new species

PLATE 3 (FIG. 1); FIGURES 23, 24; MAP 9

Alar expanse 33 mm.

Antenna brownish. Head brownish, lighter between eyes; second segment of labial palpus brown on outer side, whitish on inner side, apical segment whitish. Legs whitish, fore- and midlegs heavily shaded with brown. Thorax and tegula brown. Forewing brown shaded with deep ochreous scales; costa narrowly deep ochreous; dorsum purplish to apical two-thirds; spot at end of cell consisting of purplish scales overcast with whitish scales; termen shaded with deep ochreous; cilia whitish basally, brown beyond. Hindwing whitish, heavily shaded with gray scales in anal area; cilia brownish.

Male genitalia (slide WDD 3612, type): Uncus short, recurved; gnathos dorsoventrally flattened; harpe broad, bluntly rounded; anellar lobes symmetrical, approximately uniform in width, truncate apex bearing dentate spines; aedeagus with one prominent lateral spine at apex, vesica armed with one large cornutus.

Female genitalia: Unknown.

Type: In the collection of the British Museum (Natural History).

Type-locality: Santo Domingo, 6000 ft., southeast Peru.

Distribution: Known only from the type-locality.

Described from the male holotype: "Santo Domingo, S.E. Peru, 6000 ft., xi. 1904 (G. Ockenden)."

The single lateral spine at the apex of the aedeagus in the male genitalia separates this species from all others.

Lethata mucida, new species

PLATE 3 (FIG. 2); FIGURES 25, 26; MAP 8

Alar expanse 28 mm.

Antenna brownish. Head brownish, lighter between eyes, labial palpus brownish. Legs whitish shaded with brown. Thorax and tegula purplish brown. Forewing as in *obscura* except with heavy suffusion of purplish in anal area. Hindwing whitish heavily overcast with gray scales; cilia gray.

Male genitalia (slide WDD 3610, type): Uncus, gnathos, harpe as in *obscura;* anellar lobes symmetrical, tapering to rounded apex; one large, posteriorly directed spine at apical two-thirds; aedeagus as in *obscura* except laterally directed spines wider apart and vesica armed with two large cornuti.

Female genitalia: Unknown.

Type: In the collection of the U.S. National Museum, no. 69088.

Type-locality: San Jaoquín, Dept. Santander, Colombia.

Distribution: Known only from the type-locality.

Described from the male holotype: "COLOMBIA: San Jaoquín, Dept. Santander, 30.VIII.65 (W. D. Duckworth)."

This species is very closely related to the following one, *obscura;* however, the differences in shape and armament of the anellar lobes plus the number of cornuti and placement of lateral spines in the aedeagus readily distinguish between the two.

Lethata obscura, new species

PLATE 3 (FIG. 3); FIGURES 27, 28; MAP 10

Alar expanse 29 mm.

Antenna brownish. Head whitish, second segment of labial palpus brown on outer side, whitish on inner side, apical segment whitish. Legs whitish, shaded with brown. Thorax and tegula whitish ochreous. Forewing whitish varyingly overcast with brownish ochreous; costa, apex termen narrowly deep ochreous; spot in fold small, purplish; spot at end of cell purplish with scattered whitish scales; faint, outwardly curving, transverse line from costa at apical third to near tornus; a few fuscous scales scattered irregularly over entire wing; cilia brownish basally, whitish beyond. Hindwing whitish, overcast with gray scales in anal area; cilia whitish becoming darker near wing apex.

Male genitalia (slide WDD 3611, type): Uncus short, recurved; gnathos short, broad, dorsoventrally flattened; harpe short, regularly tapering to rounded apex; anellar lobes symmetrical, slightly broader apically, with a group of posteriorly directed spines at posterior apex; aedeagus with two laterally directed spines near apex, vesica armed with one large cornutus.

Female genitalia: Unknown.

Type: In the collection of the British Museum (Natural History).

Type-locality: La Oroya, Río Inambari, 3100 ft., Peru.

Distribution: Known only from the type-locality.

Described from the male holotype: "La Oroya, R. Inambari, S. E. Perú, 3100 ft., wet s., Oct. 1904 (G. Ockenden)."

This species is very similar to the preceding one, *mucida*, and the distinguishing characteristics are discussed in the remarks concerning that species.

Lethata optima, new species

PLATE 3 (FIG. 4); FIGURES 29, 30; MAP 10

Alar expanse 34 mm.

Antenna brown. Head brown dorsally, lighter between eyes; second segment of labial palpus brown on outer side, lighter on inner side, apical segment brown. Fore- and midlegs brown, hindlegs

whitish. Thorax and tegula reddish brown. Forewing grayish overcast with reddish brown especially in anal area; costa narrowly ochreous; termen ochreous; spot at end of cell purplish with scattered white scales; entire wing with scattered fuscous scales; cilia white basally, gray beyond. Hindwing whitish overcast with gray; cilia white basally, gray beyond.

Male genitalia (slide WDD 3614, type): Uncus short, recurved; gnathos short, dorsally flattened; harpe short, somewhat excavated in saccular area, rounded at apex; anellar lobes symmetrical, median edge approximately straight to apex, lateral edge sinuate and tapering to acute apex, bladelike; aedeagus with one lateral spine near apex, vesica armed with three cornuti, one large, one medium, one small.

Female genitalia: Unknown.

Type: In the collection of the British Museum (Natural History).

Type-locality: Huancabamba, Cerro de Pasco, 6000–10,000 ft., Peru.

Distribution: Known only from the type locality.

Described from the male holotype: "Huancabamba, Cerro de Pasco, 6–10,000 ft., (Böttger)."

The shape of the anellar lobes and shape and armature of the aedeagus in the male genitalia distinguishes this species from all others.

***Lethata amazona*, new species**

PLATE 3 (FIG. 5); FIGURE 36; MAP 9

Alar expanse 38 mm.

Antenna brownish. Head white; labial palpus white shaded with brown on outer side. Legs whitish, forelegs heavily shaded with brown. Thorax and tegula white. Forewing rosy tan with costa narrowly deep ochreous; dorsal edge brown; from middle of base a white suffusion blends outward and upward with ground color; spot at end of cell composed of ring of white enclosing brown transverse line; spot in fold at basal one-third composed of ring of white enclosing brown spot; median spot at basal one-third white with faint brown scaling in center; entire wing sprinkled with occasional brown scales; cilia brown. Hindwing yellow ochreous deepening toward apex; cilia whitish in anal area, brownish at apex.

Male genitalia: Unknown.

Female genitalia (slide WDD 3601, type): Ductus bursae membranous; ostium bursae membranous; ostium broad; inception of ductus seminalis very near ostium bursae; lobes of ovipositor heavily sclerotized, intersegmental membrane between ovipositor lobes and eighth segment sclerotized holding lobes in close association with eighth segment.

Type: In the collection of the British Museum (Natural History).

Type-locality: Santo Antônio do Javary, Upper Amazon, Brazil.

Distribution: Known only from the type-locality.

Described from the female holotype: "Santo Antônio do Javary, Upper Amazon, June 07 (S. M. Klages), Rothschild Bequest, B. M. 1939–1."

This species is one of the largest and most striking of the entire genus. It is indeed unfortunate that it is known only from the holotype.

The heavily sclerotized ovipositor lobes and sclerotized intersegmental membrane between the ovipositor lobes and eighth segment readily spearate *L. amazona* from all other females in this genus.

Lethata sciophthalma (Meyrick), new combination

PLATE 3 (FIG. 6); FIGURE 35; MAP 5

Stenoma sciophthalma Meyrick, 1931, Exotic Microlepidoptera, vol. 4, p. 34.

Alar expanse 22 mm.

Antenna brown. Head rosy gray; labial palpus pale grayish pink. Legs whitish, fore- and midlegs overcast with brown. Thorax and tegula rosy gray. Forewing rosy ochreous, costal edge pink; spot at end of cell purple suffused with whitish scales in center; cilia rosy white, darker at apex. Hindwing ochreous, overcast with gray; cilia rosy white.

Male genitalia: Unknown.

Female genitalia (slide WDD 3342, type): Ductus bursae membranous, emerging laterally from ostium bursae; ostium bursae sclerotized with a large lateral indentation; ostium broad; inception of ductus seminalis near ostium.

Type: In the Naturhistorisches Museum, Vienna, Austria.

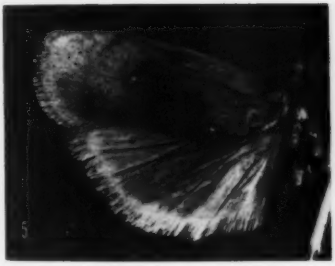
Type-locality: Rio Prêto, zw. Boquerão u. Sta. Rita, Brazil.

Distribution: Known only from the type-locality.

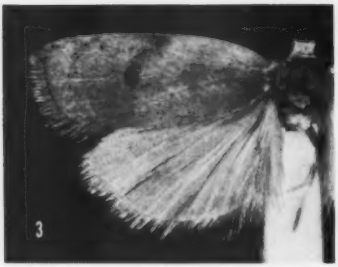
The large lateral indentation in the ostium bursae serves to separate this species from the others included in the genus *Lethata*.

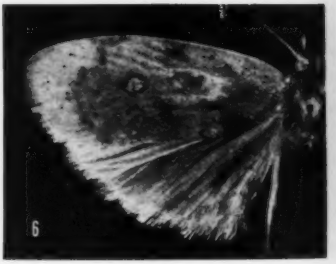
Checklist of *Lethata*

1. *trochalosticta* (Walsingham)
2. *aromatica* (Meyrick)
3. *asthenopa* (Meyrick)
4. *bovinella* (Busck)
   curiata Meyrick
   indistincta Amsel
5. *buscki* Duckworth
6. *fusca* Duckworth
7. *glaucopa* (Meyrick)
8. *invigilans* (Meyrick)
9. *leucothea* (Busch)
10. *anophthalma* (Meyrick)
    badiella Amsel
    maculata Duckworth
11. *pyrenodes* (Meyrick)
12. *ruba* Duckworth
13. *satyropa* (Meyrick)
14. *gypsolitha* (Meyrick)

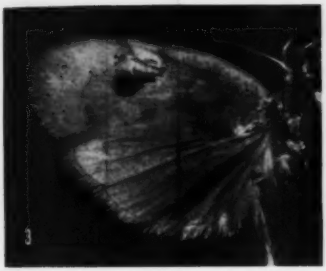


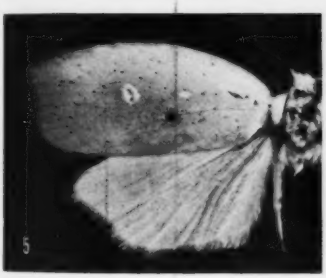
Left wings: 1, *Lethata striolata* (Meyrick); 2, *L. monopa*, new species; 3, *L. oculosa*, new species; 4, *L. lanosa*, new species; 5, *L. gypsolitha* (Meyrick); 6, *L. herbacea* (Meyrick).

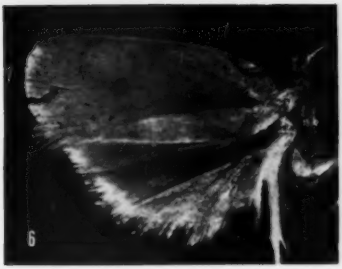




Left wings: 1, *Lethata myopina* (Zeller); 2, *L. dispersa*, new species; 3, *L. angusta*, new species; 4, *L. fernandezyepezi*, new species; 5, *L. irresoluta*, new species; 6, *L. illustra*, new species.







Left wings: 1, *Lethata aletha*, new species; 2, *L. mucida*, new species; 3, *L. obscura*, new species; 4, *L. optima*, new species; 5, *L. amazona*, new species; 6, *L. sciophthalma* (Meyrick).

15. *herbacea* (Meyrick)
16. *myopina* (Zeller)
17. *sciophthalma* (Meyrick)
18. *striolata* (Meyrick)
19. *amazona* Duckworth
20. *fernandezyepezi* Duckworth
21. *lanosa* Duckworth
22. *monopa* Duckworth
23. *oculosa* Duckworth
24. *dispersa* Duckworth
25. *angusta* Duckworth
26. *mucida* Duckworth
27. *optima* Duckworth
28. *obscura* Duckworth
29. *illustra* Duckworth
30. *irresoluta* Duckworth
31. *aletha* Duckworth

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1966. New synonymy and new assignments in Western Hemisphere Stenomidae (Lepidoptera: Gelechioidea). Proc. Ent. Soc. Washington, vol. 68, pp. 195–198.

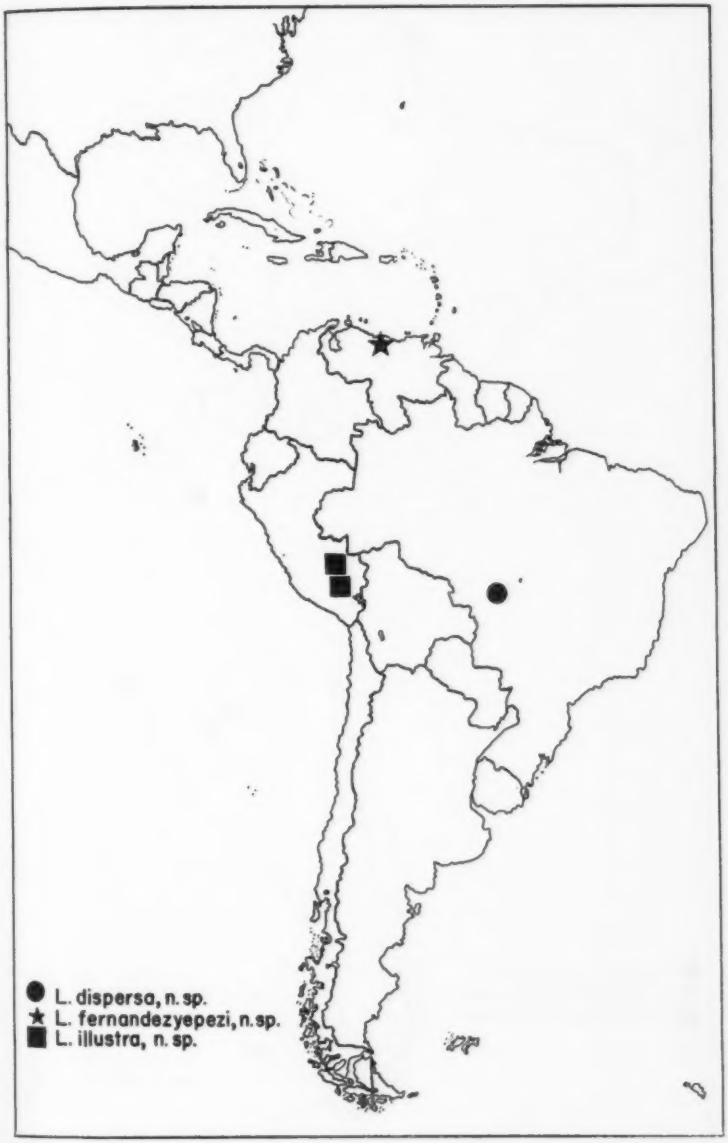
MAP 1.—Distribution of species.

MAP 2.—Distribution of species.

MAP 3.—Distribution of species.

MAP 4.—Distribution of species.

MAP 5.—Distribution of species.



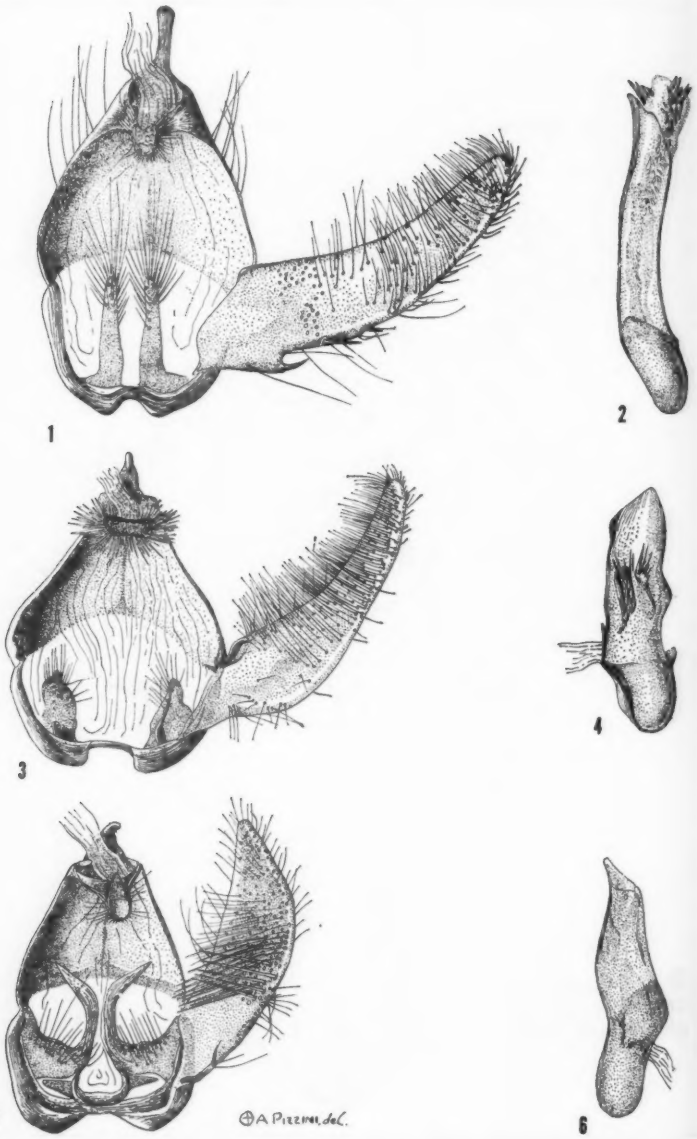
MAP 6.—Distribution of species.

MAP 7.—Distribution of species.

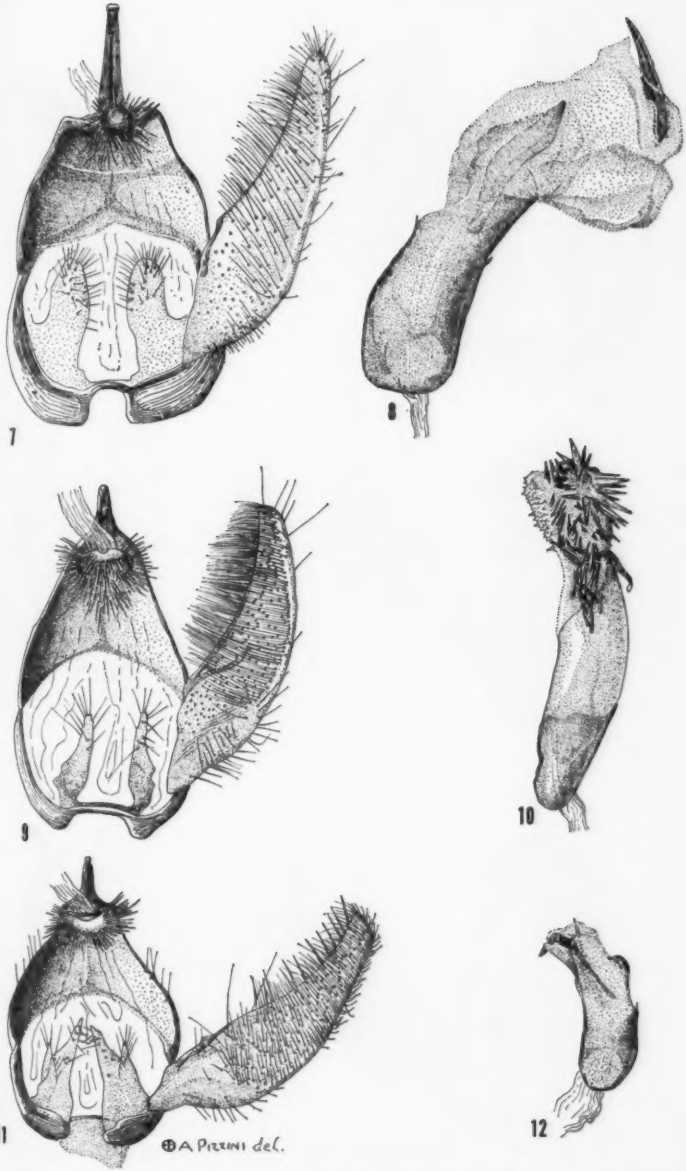
MAP 8.—Distribution of species.

MAP 9.—Distribution of species.

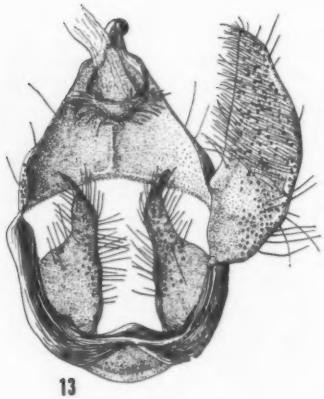
MAP 10.—Distribution of species.

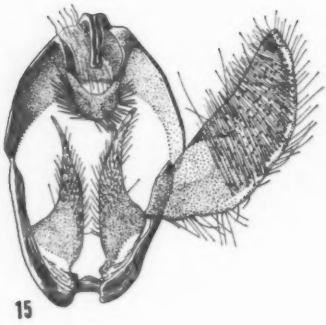


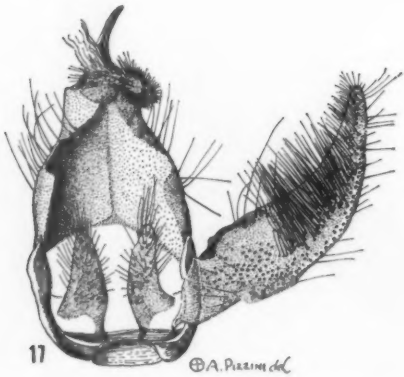
FIGURES 1–6.—Ventral view of male genitalia (aedeagus removed): 1, *Lethata striolata* (Meyrick); 3, *L. monopa*, new species; 5, *L. lanosa*, new species. Aedeagus: 2, *L. striolata* (Meyrick); 4, *L. monopa*, new species; 6, *L. lanosa*, new species.



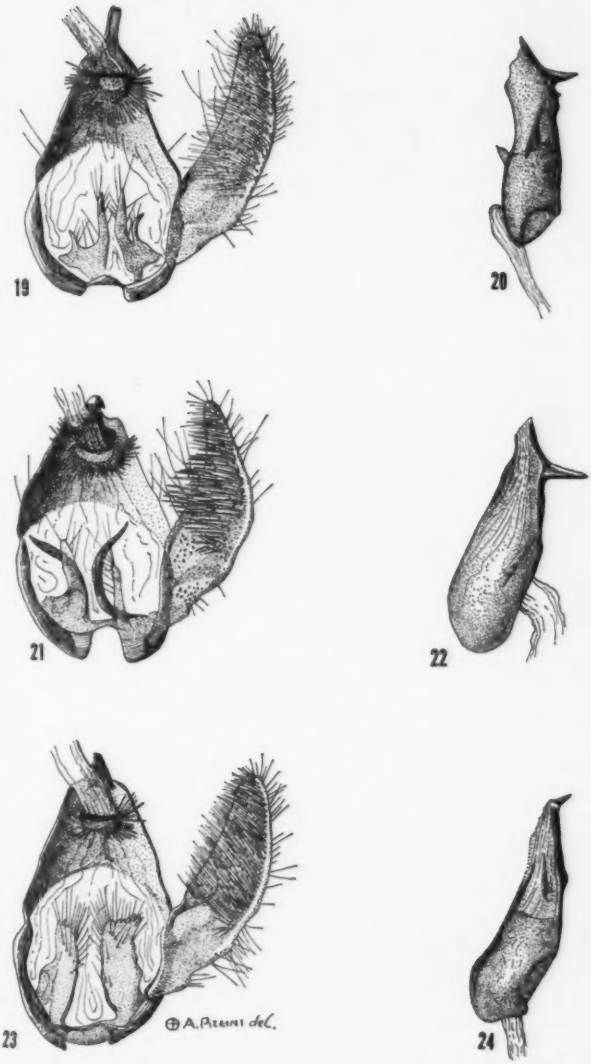
FIGURES 7–12.—Ventral view of male genitalia (aedeagus removed): 7, *Lethata gypsolitha* (Meyrick); 9, *L. herbacea* (Meyrick); 11, *L. myopina* (Zeller). Aedeagus: 8, *L. gypsolitha* (Meyrick); 10, *L. herbacea* (Meyrick); 12, *L. myopina* (Zeller).



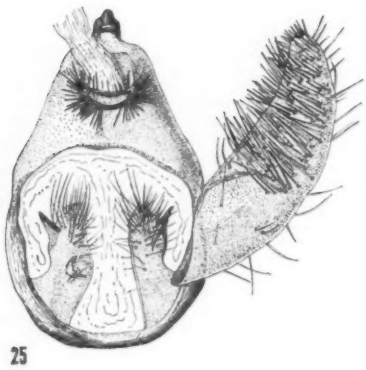


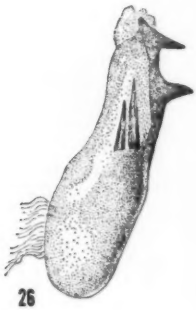


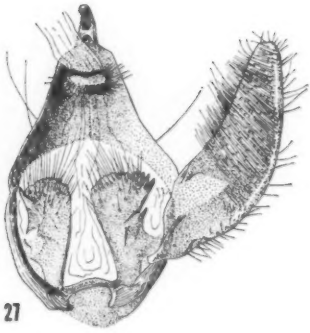
FIGURES 13–18.—Ventral view of male genitalia (aedeagus removed): 13, *Lethata dispersa*, new species; 15, *L. angusta*, new species; 17, *L. fernandezyepezi*, new species. Aedeagus: 14, *L. dispersa*, new species; 16, *L. angusta*, new species; 18, *L. fernandezyepezi*, new species.

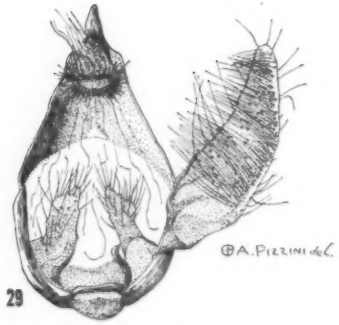


FIGURES 19–24.—Ventral view of male genitalia (aedeagus removed): 19, *Lethata irresoluta*, new species; 21, *L. illustra*, new species; 23, *L. aletha*, new species. Aedeagus: 20, *L. irresoluta*, new species; 22, *L. illustra*, new species; 24, *L. aletha*, new species.

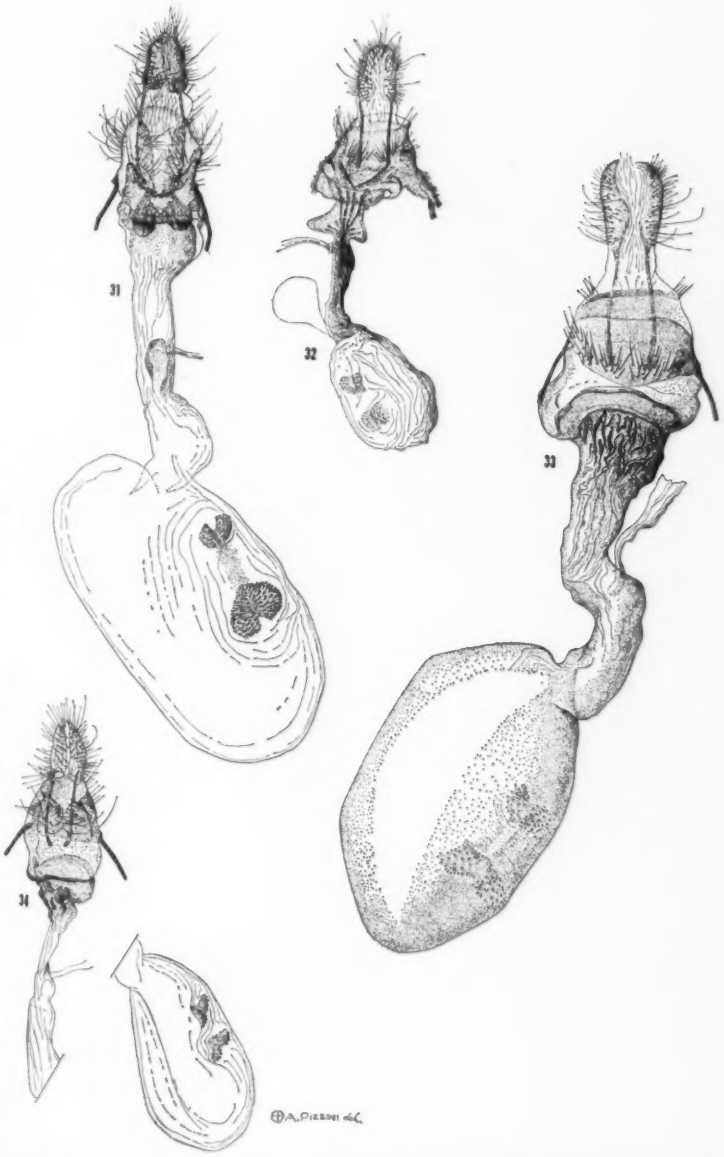




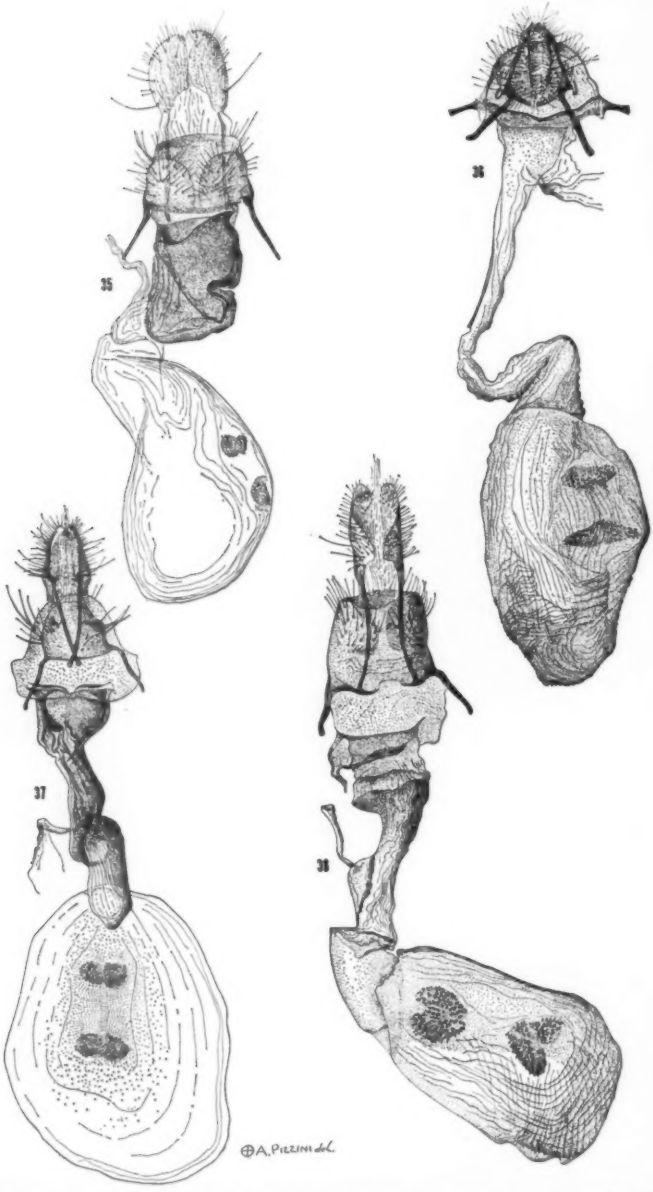




FIGURES 25–30.—Ventral view of male genitalia (aedeagus removed): 25, *Lethata mucida*, new species; 27, *L. obscura*, new species; 29, *L. optima*, new species. Aedeagus: 26, *L. mucida*, new species; 28, *L. obscura*, new species; 30, *L. optima*, new species.



FIGURES 31–34.—Ventral view of female genitalia: 31, *Lethata trochalosticta* (Walsingham); 32, *L. aromatica* (Meyrick); 33, *L. buscki* Duckworth; 34, *L. pyrenodes* (Meyrick).



FIGURES 35–38.—Ventral view of female genitalia: 35, *Lethata sciophthalma* (Meyrick); 36, *L. amazona*, new species; 37, *L. illustra*, new species; 38, *L. oculosa*, new species.

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